

ITEM: 10

SUBJECT: Linda County Water District, Wastewater Treatment Plant, Yuba and Sutter Counties

BOARD ACTION: *Consideration of NPDES Permit Renewal (NPDES No. CA0083348) and Order Amending Time Schedule Order R5-2011-0056*

BACKGROUND: Linda County Water District (Discharger) owns and operates the Wastewater Treatment Plant (Facility). The Facility was recently upgraded and expanded to discharge up to 5.0 million gallons per day (MGD) of tertiary level treated effluent to Feather River. The Facility currently discharges to a series of seven percolation ponds that are hydrologically connected to the Feather River. Direct discharges to the Feather River are projected to occur within the term of the proposed NPDES Permit. The Discharger plans to regionalize its wastewater treatment with the City of Marysville, and increase the Facility's capacity to accommodate an additional 1.7 MGD, for an increased discharge of up to 6.7 MGD to the Feather River.

Existing Order R5-2006-0096 contains effluent limits for chloroform, chromium (VI), cyanide, dibenzo(a,h)anthracene, lead, tetrachloroethene, zinc, aluminum, cis-1,2-dichloroethene, iron, methoxychlor, oil and grease, organochlorine pesticides, settleable solids, and thiobencarb. The Discharger's past three years of monitoring data (after the Facility upgrade) did not indicate concentrations of these constituents in the effluent discharge, and therefore, the proposed NPDES Permit does not include these effluent limitations. The proposed NPDES Permit does contain however a new effluent limitations for carbon tetrachloride.

Construction of the new Facility was completed in January 2012; however, the Facility's treatment systems are still in a startup phase and rehabilitation of the direct discharge side-bank outfall (Discharge Point No. 001) is still required. Therefore, a separate Order, amending Time Schedule Order R5-2011-0056, is proposed to provide a time schedule for the Discharger to comply with existing final effluent limitation for nitrate plus nitrite. The amending Order also removes compliance schedules for compliance with aluminum, electrical conductivity (EC), manganese, bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, lead, mercury, settleable solids, and zinc effluent limitations, since those effluent limitations are proposed to be removed from the NPDES permit.

ISSUES: Public comments were received from the Discharger and the Central Valley Clean Water Association (CVCWA). The following is a summary of the comments on the major permitting issues and Central Valley Water Board staff responses. Detailed comments and responses are included in the Staff Response to Comments document included in this agenda item.

Mixing Zones and Applicable Dilution Credits for Human Health

Constituents. The Discharger commented that recent effluent monitoring data indicates that the new Facility cannot comply with the proposed dichlorobromomethane effluent limitation contained in the tentative NPDES Permit, and therefore, requested that the full dilution credit (347:1) available for human health constituents be applied. Similarly, CVCWA commented that the tentative NPDES Permit impermissibly denies calculated dilution credits and truncates effluent limitations without making the requisite findings. Central Valley Water Board staff disagrees in part.

Central Valley Water Board staff responded that the performance-based effluent limitation should be calculated based on the performance of the new Facility. Therefore, using the limited new monitoring data, the proposed NPDES Permit contains recalculated dichlorobromomethane effluent limitations that utilize approximately a 55:1 (receiving water/effluent) dilution in the Feather River. Staff worked with the Discharger who confirmed that they can comply with the performance-based dilution level. Additionally, full dilution credit of 347:1 is not proposed because the recalculated performance-based limits were appropriately based on the following policies:

- (1) In accordance with Section 1.4.2.2 of the SIP, where mixing zones must be as small as practical, and
- (2) In accordance with State and federal antidegradation policies, degradation of the receiving water downstream of the edge of mixing zone must be minimized by the implementation of Best Practical Treatment or Control (BPTC).

Per Section 1.4.2.1 of the SIP, dilution credits may be limited or denied on a pollutant-by-pollutant basis, which may result in a dilution credit for all, some, or no pollutants in a discharge. Because the Discharger can meet a performance-based limit of approximately 55:1, the granting of a full dilution credit would not comply with SIP section 1.4.2.2 stating that mixing zones, if granted, must be as small as practicable.

Chemical Additives Evaluation and Minimization Study. CVCWA and the Discharger commented that the Chemical Additives Evaluation and Minimization Study are improper and should be deleted. These study requirements were removed from the proposed NPDES Permit because the Salinity Evaluation and Minimization Study requirement in the proposed permit will provide the same information.

Mercury Mass Loading Limit. The Discharger commented that the mercury performance-based mass effluent limitation included in the proposed NPDES Permit does not provide for an increase in the mass loading of mercury as the Facility expands its capacity from 1.8 to 5.0 million gallons per day (MGD). Staff agrees; however, staff responded that the proposed NPDES Permit contains the same mass loading limit from Existing Order R5-2006-0096, which the Central Valley Water Board of that time established for the increased capacity to 5.0 MGD to maintain mercury discharges at current levels until a mercury TMDL is adopted. The

proposed NPDES Permit must comply with State and federal Antibalancing requirements, and therefore, cannot increase the mass loading limit without new information justifying an increase in the discharge of mercury. As the facility proceeds with its regionalization and submits new information justifying an increase in the mercury mass loading limit, the permit may be reopened and the appropriate limits modified.

Nitrate plus Nitrite Effluent Limitation. The Discharger states that the Facility will have difficulty in meeting its proposed final nitrate plus nitrite limitation due to the Facility's recent installation of four air activated sludge basins (including nitrification and denitrification) that have yet to achieve optimal operation performance. The Discharger requests a time schedule to provide time to optimize the facility's nitrification-denitrification processes. Staff concurs and the proposed Order to amend Time Schedule Order R5-2011-0056 was modified to allow the Discharger additional time (up to 31 December 2012) to optimize nitrate removal in the new treatment system and subsequently comply with the final effluent limit.

pH Effluent Limitation for Discharges to Ponds. The Discharger requests that the instantaneous minimum effluent limitation for pH when effluent is discharged to the percolation ponds be changed to 6.0 standard units from the 6.5 standard units in the Basin Plan. This request for lowering of the instantaneous minimum effluent limitation for pH at the percolation ponds should not have a detrimental impact on groundwater due to the buffering capacity of the soil under the percolation ponds. Staff agrees and has made the corresponding changes to the proposed Permit for the pH limitations when discharging to the percolation ponds.

RECOMMENDATION: Board adoption of the proposed NPDES Permit Renewal and accompanying Order to amend *Time Schedule Order R5-2011-0056*.

Mgmt. Review _____
Legal Review _____

7/8 June 2012
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670